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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/671,301	09/28/2000	Takeo Kitayama	PM 273903558220	8390

7590 12/12/2002

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EXAMINER
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NGUYEN, KIMBERLY T

ART UNIT	PAPER NUMBER
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1774

DATE MAILED: 12/12/2002

9

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/671,301

Applicant(s)

KITAYAMA ET AL.

Examiner

Kimberly T. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 September 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) ☒ All b) ☐ Some \* c) ☐ None of:  
 1. ☒ Certified copies of the priority documents have been received.  
 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
 \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
 a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

This action is in response to the amendment submitted on September 30, 2002.

### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office Action.

**Claims 1-6** are rejected under 35 U.S.C. 103(a) as being unpatentable over Yagi et al., U.S. Pat. No. 4,894,281 in view of Nakajima et al., U.S. Pat. No. 6,207,600 B1 as previously stated in the Office Action submitted on March 28, 2002.

### ***Response to Arguments***

Applicants' argument filed September 30, 2002 have been fully considered but they are not persuasive.

On page 3, Applicants argue that Yagi does not show that the fibers have a melting points, nucleating agents, and average fiber diameters as in the instant invention. Though Yagi does not specifically show these parameters, Nakajima is used *in combination with* Yagi to show that it is obvious to make a molded body with these limitations. Nakajima shows a reinforced fibrous molding with the instantly claimed melting points and nucleating agents (column 4, lines 50-57 and column 8, lines 49-54). The obviousness of the average fiber diameters is discussed below.

On pages 3-5, Applicants argue that there is no description of "polypropylene fibers" in Yagi at column 6, lines 11-32 and that none of the references show that polypropylene fibers are effectively used in polypropylene moldings. Yagi, however, does show elsewhere in the

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reference in column 1, lines 19-67 that polypropylene fibers can be used in the molded polypropylene body since Yagi shows that the molded body comprises ultra-high-molecular weight polyethylene reinforcing fibers and that such ultra-high-molecular weight polyethylene fibers are functionally equivalent to polypropylene fibers. Thus, Applicants' argument is not persuasive.

On page 4, Applicants argue that nothing in Nakajima specifically shows a "plastic" molded product or fiber-reinforced moldings. Examiner disagrees because Nakajima shows fiber reinforced moldings in column 1, lines 6-13 and in the Title "Fibers and Fibrous Moldings Made by Using the Same." Further, Nakajima is used *in combination with* Yagi, which already shows a fiber reinforced polypropylene matrix, to show that it is known to use polypropylene fibers with the melting points as in the instant invention and to add a nucleating agent to the fibers in order to make reinforcing polypropylene fibers.

On page 5, Applicants argue that there is no teaching, suggestion, or motivation in the cited references to show that the formula of claim 1 is satisfied nor that the diameter of the fibers could be determined by routine experimentation. This argument is not persuasive because Applicants have not shown that the molded body of Yagi does not satisfy the formula of instant claim 1. The combination of Yagi and Nakajima shows a polypropylene-based matrix reinforced with polypropylene fibers and thus, could satisfy the formula, absent any evidence to the contrary. Further, the diameter of the fibers are optimizable since such a diameter, as instantly claimed, is a property which can be easily determined by one of ordinary skill in the art. With regard to the limitation of the diameter, absent a showing of unexpected results, it is obvious to modify the conditions of a composition because they are merely the result of routine

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experimentation. The experimental modification of prior art in order to optimize operation conditions (e.g. diameter) fails to render claims patentable in the absence of unexpected results. All of the aforementioned limitations are optimizable as they control the mechanical strength, flexibility, and level of reinforcement of the molded body. As such, they are optimizable. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the molded body with the limitations of the fiber diameters since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimberly T. Nguyen whose telephone number is (703) 308-8176. The examiner can normally be reached on Monday to Friday, except on every other Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H. Kelly can be reached on (703) 308-0449. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Kimberly T. Nguyen  
Examiner  
December 11, 2002

A handwritten signature in cursive script, appearing to read "Cynthia H. Kelly".